### **PATENT COOPERATION TREATY**

# **PCT**

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER		see Form PCT/ISA/220				
P10815 PC	ACTION	as well	as, where applicable, item 5 below.				
International application No.	International filing date (day/mor	th/year)	(Earliest) Priority Date (day/month/year)				
PCT/DK2004/000148	05/03/2004	<u>L</u>	07/03/2003				
Applicant	, <u>, , , , , , , , , , , , , , , , , , </u>		<u> </u>				
1							
7TM PHARMA A/S	****						
This International Search Report has been according to Article 18. A copy is being tra	This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.						
This International Search Report consists	of a total of <u>5</u> sl	eets.					
X It is also accompanied by	a copy of each prior art document	cited in this	report.				
Basis of the report							
language in which it was filed, unle	nternational search was carried of ess otherwise indicated under this	t on the bas tem.	sis of the international application in the				
The international s this Authority (Rule	earch was carried out on the basis	of a transla	ation of the international application furnished to				
b. With regard to any nucleo	tide and/or amino acid sequenc	e disclosed	in the international application, see Box No. I.				
2. Certain claims were foun	d unsearchable (See Box II).						
3. Unity of invention is lack	ing (see Box III).						
4. With regard to the title,							
X the text is approved as sub	mitted by the applicant.						
the text has been establish	the text has been established by this Authority to read as follows:						
•							
5. With regard to the abstract,							
X the text is approved as sub							
the text has been establish may, within one month from	ed, according to Rule 38.2(b), by to the date of mailing of this interna	nis Authority tional searc	y as it appears in Box No. IV. The applicant h report, submit comments to this Authority.				
6. With regard to the <b>drawings</b> ,							
a. the figure of the drawings to be published with the abstract is Figure No.							
as suggested by the	• •						
	Authority, because the applicant for		- <del>-</del>				
as selected by this b. X none of the figures is to be	Authority, because this figure bette published with the abstract	er character	izes the invention.				
	pablicited with the abstract.						

International Application No PCT/DK2004/000148

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched (classification system followed by classification symbols)} \\ IPC 7 & G06F & C07K \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB, MEDLINE

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SCHMITT S ET AL: "A New Method to Detect Related Function Among Proteins Independent of Sequence and Fold Homology" JOURNAL OF MOLECULAR BIOLOGY, LONDON, GB, vol. 323, no. 2, 18 October 2002 (2002-10-18), pages 387-406, XP004449877 ISSN: 0022-2836 page 388, left-hand column, paragraph 1 - page 389, left-hand column, paragraph 2 page 389, right-hand column, paragraph 1 page 392, right-hand column, paragraph 1 page 393, right-hand column, paragraph 1 page 395, right-hand column, paragraph 1 page 398, left-hand column, paragraph 3 - page 403, right-hand column, paragraph 1 abstract; figures 1-13	1-43

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
30 March 2005	03/05/2005
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Swarén, P.

International Application No
PCT/DK2004/000148

Contempory: Collation of Collation	C (Ca=+!=	ption) DOCUMENTS CONSIDERED TO BE DELEVAND	PC1/DK2004/000148
X LAPINSH MARIS ET AL: "Classification of G-protein coupled receptors by alignment-independent extraction of principal chemical properties of primary amino acid sequences." PROTEIN SCIENCE: A PUBLICATION OF THE PROTEIN SCI			Relevant to claim No
G-protein coupled receptors by alignment-independent extraction of principal chemical properties of primary amino acid sequences.  PROTEIN SCIENCE: A PUBLICATION OF THE PROTEIN SOCIETY. UNITED STATES APR 2002, vol. 11, no. 4, April 2002 (2002-04), pages 795-805, XP008026362 ISSN: 0961-8368  A page 795, left-hand column, paragraph 1 page 796, right-hand column, paragraph 2 page 798, left-hand column, paragraph 2 page 799, right-hand column, paragraph 1 page 800, right-hand column, paragraph 2 page 800, right-hand column, paragraph 2 page 800, right-hand column, paragraph 2 page 800, left-hand column, paragraph 2 page 800, right-hand column, paragraph 2 page 800, right-hand column, paragraph 2 page 801, line 60 - column 6, line 27 column 14, lines 35-56 column 15, lines 30-51 abstract; claims 1-26; figures 1-3,7  A FLOWER D R: "MODELLING G-PROTEIN-COUPLED RECEPTORS FOR DRUG DESIGN" BIOCHIMICA ET BIOPHYSICA ACTA, AMSTERDAM, NL, vol. 1422, no. 3, 16 November 1999 (1999-11-16), pages 207-234, XP001077874 ISSN: 0006-3002 cited in the application page 208, left-hand column, paragraph 2 page 211, right-hand column, paragraph 2 page 212, right-hand column, paragraph 1 page 225, right-hand column, paragraph 2 page 219, left-hand column, paragraph 1 page 221, left-hand column, paragraph 1 page 222, left-hand column, paragraph 1 page 223, right-hand column, paragraph 1 page 224, left-hand column, paragraph 1 page 225, left-hand column, paragraph 1 page 227, left-hand column, paragraph 1 page 228, right-hand column, paragraph 1 page 227, left-hand column, paragraph 1 page 228, right-hand column, paragraph 2 page 219, left-hand column, paragraph 1 page 228, right-hand column, paragraph 2 page 229, left-	X	LAPINSH MARIS ET AL: "Classification of	
page 798, right-hand column, paragraph 2 page 798, right-hand column, paragraph 2 page 799, right-hand column, paragraph 1 page 800, right-hand column, paragraph 2 page 803, left-hand column, paragraph 2 page 803, left-hand column, paragraph 2 abstract; figures 1,2  A US 5 436 850 A (BOWIE JAMES U ET AL) 25 July 1995 (1995-07-25) column 1, line 60 - column 6, line 27 column 15, lines 30-51 abstract; claims 1-26; figures 1-3,7  FLOWER D R: "MODELLING G-PROTEIN-COUPLED RECEPTORS FOR DRUG DESIGN" BIOCHIMICA ET BIOPHYSICA ACTA, AMSTERDAM, N., Nol. 1422, no. 3, 16 November 1999 (1999-11-16), pages 207-234, XP001077874 ISSN: 0006-3002 cited in the application page 208, left-hand column, paragraph 2 page 211, right-hand column, paragraph 2 page 212, right-hand column, paragraph 2 page 214, left-hand column, paragraph 2 page 215, right-hand column, paragraph 4 page 217, right-hand column, paragraph 4 page 227, right-hand column, paragraph 1 page 228, left-hand column, paragraph 1 page 229, left-hand column, paragraph 1 page 221, right-hand column, paragraph 1 page 222, left-hand column, paragraph 1 page 223, right-hand column, paragraph 1 page 224, left-hand column, paragraph 1 page 225, left-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, left-hand column, paragraph 1 page 227, left-hand column, paragraph 2 page 228, right-hand column, paragraph 2 page 229, left-hand column, paragraph 2		G-protein coupled receptors by alignment-independent extraction of principal chemical properties of primary amino acid sequences."  PROTEIN SCIENCE: A PUBLICATION OF THE PROTEIN SOCIETY. UNITED STATES APR 2002, vol. 11, no. 4, April 2002 (2002-04), pages 795-805, XP008026362  ISSN: 0961-8368	
25 July 1995 (1995-07-25) column 1, line 60 - column 6, line 27 column 14, lines 35-56 column 15, lines 30-51 abstract; claims 1-26; figures 1-3,7  FLOWER D R: "MODELLING G-PROTEIN-COUPLED RECEPTORS FOR DRUG DESIGN" BIOCHIMICA ET BIOPHYSICA ACTA, AMSTERDAM, Vol. 1422, no. 3, 16 November 1999 (1999-11-16), pages 207-234, XP001077874 ISSN: 0006-3002 cited in the application page 208, left-hand column, paragraph 2 page 211, right-hand column, paragraph 2 page 212, right-hand column, paragraph 1 page 215, right-hand column, paragraph 4 page 217, right-hand column, paragraph 4 page 217, right-hand column, paragraph 4 page 219, left-hand column, paragraph 1 page 222, left-hand column, paragraph 1 page 222, right-hand column, paragraph 1 page 223, right-hand column, paragraph 1 page 225, left-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, left-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 228, right-hand column, paragraph 2 page 229, left-hand column, paragraph 2	A	page 796, right-hand column, paragraph 2 page 798, left-hand column, paragraph 2 page 799, right-hand column, paragraph 1 page 800, right-hand column, paragraph 2 - page 803, left-hand column, paragraph 2	13
RECEPTORS FOR DRUG DESIGN"  BIOCHIMICA ET BIOPHYSICA ACTA, AMSTERDAM,  vol. 1422, no. 3, 16 November 1999 (1999-11-16), pages 207-234, XP001077874  ISSN: 0006-3002 cited in the application page 208, left-hand column, paragraph 2 page 211, right-hand column, paragraph 2 page 212, right-hand column, paragraph 1 page 215, right-hand column, paragraph 1 page 216, left-hand column, paragraph 4 page 217, right-hand column, paragraph 4 page 219, left-hand column, paragraph 1 page 220, right-hand column, paragraph 1 page 221, left-hand column, paragraph 1 page 222, left-hand column, paragraph 1 page 223, right-hand column, paragraph 1 page 224, left-hand column, paragraph 1 page 225, left-hand column, paragraph 1 page 227, left-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, left-hand column, paragraph 2 page 228, right-hand column, paragraph 2 page 229, left-hand column, paragraph 2 page 229, left-hand column, paragraph 2 page 229, left-hand column, paragraph 2 figures 1,2,5,8,9	A	25 July 1995 (1995-07-25) column 1, line 60 - column 6, line 27 column 14, lines 35-56 column 15, lines 30-51	1
_/	A	RECEPTORS FOR DRUG DESIGN" BIOCHIMICA ET BIOPHYSICA ACTA, AMSTERDAM, NL, vol. 1422, no. 3, 16 November 1999 (1999-11-16), pages 207-234, XP001077874 ISSN: 0006-3002 cited in the application page 208, left-hand column, paragraph 2 page 211, right-hand column, paragraph 2 page 212, right-hand column, paragraph 1 page 215, right-hand column, paragraph 2 page 216, left-hand column, paragraph 4 page 217, right-hand column, paragraph 4 page 219, left-hand column, paragraph 4 page 220, right-hand column, paragraph 1 page 222, left-hand column, paragraph 1 page 223, right-hand column, paragraph 1 page 225, left-hand column, paragraph 1 page 226, left-hand column, paragraph 1 page 227, left-hand column, paragraph 1 page 227, right-hand column, paragraph 1 page 227, right-hand column, paragraph 3 page 228, right-hand column, paragraph 2 page 229, left-hand column, paragraph 2	13, 20-22,
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PCT/DK2004/000148

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	EP 0 818 744 A (PROTEUS MOLECULAR DESIGN) 14 January 1998 (1998-01-14) the whole document	9-11, 39-41
		·

Information on patent family members

International Application No
PCT/DK2004/000148

	Patent document cited in search report		Publication date		Patent family member(s)	Publication date		
	US 5436850	Α	25-07-1995	AU WO	2408292 A 9301484 A2	11-02-1993 21-01-1993		
	EP 0818744	Α	14-01-1998	EP	0818744 A2	14-01-1998		